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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,146	08/16/2001	Michihiro Saito	NIP-236	1283

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05/28/2003

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EXAMINER

HANNAHER, CONSTANTINE

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,146

Applicant(s)

SAITO ET AL.

Examiner

Constantine Hannaher

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. It is considered that the application claims two species but no requirement for election is made at this time.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is too long.

Claim Objections

3. Claims 3-6 are objected to because of the following informalities: "glassic carbon" should appear as --glassy carbon--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 2 is identical to claim 1 but for the "sample holder and" in the preamble. The presence of this apparatus recitation is incapable of changing the scope of a "measurement method." Since two independent claims may not have the same scope, and claim 1 has an indeterminate scope as explained above, the scope of claim 2 cannot be ascertained.

Claim 2 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 3 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 3 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 4 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 4 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 5 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 5 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 6 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 6 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 7 does not set forth any steps in a process of measurement. The claim recites aspects of the apparatus or the results of unclaimed activities instead. Since there no steps in the "measurement method" the scope of the claim cannot be ascertained.

Claim 7 provides for the use of a sample holder, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 2 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claim 2 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

7. Claim 3 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claim 3 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

8. Claim 4 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claim 4 is directed to neither a "process" nor a "machine," but rather

embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

9. Claim 5 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claim 5 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

10. Claim 6 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claim 6 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

11. Claim 7 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149

USPQ 475 (D.D.C. 1966). Claim 7 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schellenberger *et al.* (US006027873A).

With respect to independent claim 1, as best understood in the absence of clarity, Schellenberger *et al.* discloses a sample holder 12 (Fig. 1) which holds a sample (Fig. 4) through surface tension (column 4, lines 38-40) and only the sample is placed in the path of light from source 44 to detector 46 in view of through holes 18. Clearly, any measurement method using this sample

holder **12** of Schellenberger *et al.* will be characterized by the absence of any sample holder material as an intermediary (Fig. 4 again). In view of the measurement of fluorogenic groups as described by Schellenberger *et al.* at column 6, lines 57-60 it would have been obvious to one of ordinary skill in the art that any measurement method for analysis and measurement of a sample using the sample holder **12** occurred in an apparatus **10** of one of the recited types.

With respect to independent claim 2, as best understood in the absence of clarity and the mixture of statutory categories of invention, Schellenberger *et al.* is applied as in the explanation of the rejection of claim 1. Testing plate **12** is a sample holder.

15. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schellenberger *et al.* (US006027873A) and Hunter (US006387331B1).

With respect to independent claim 3, as best understood in the absence of clarity and the mixture of statutory categories of invention, Schellenberger *et al.* discloses a sample holder **12** (Fig. 1) which holds a sample (Fig. 4) through surface tension (column 4, lines 38-40). The sample holder **12** has a hole **18** with a form which may be conical (column 4, lines 30-33) and there is no leakage (column 4, lines 45-46) despite the presence of a hole with an area in the recited range (in view of the diameter at column 4, line 34). In view of the measurement of fluorogenic groups as described by Schellenberger *et al.* at column 6, lines 57-60 it would have been obvious to one of ordinary skill in the art that any measurement method for analysis and measurement of a sample using the sample holder **12** occurred in an apparatus **10** of one of the recited types. Testing plate **12** is a sample holder. Although Schellenberger *et al.* proposes a variety of materials for the sample holder **12** (column 3, lines 38-41) and some of the materials may be fairly described as carbonaceous, a material of the recited group is known in the art of sample holders for a fluorescence measuring apparatus from Hunter (claim 11). See the apparatus (Fig. 7) and platen **10** with through holes **12** and fluorescence

identified as an optical interrogation technique (column 6, lines 10-14). Since the art recognizes this material as equivalent to the materials proposed by Schellenberger *et al.* in view of the disclosure of Hunter at column 4, lines 51-54 no specific motivation is necessary to replace one material with another.

With respect to independent claim 4, as best understood in the absence of clarity and the mixture of statutory categories of invention, Schellenberger *et al.* discloses a sample holder 12 (Fig. 1) which holds a sample (Fig. 4) through surface tension (column 4, lines 38-40). The sample holder 12 has a hole 18 with a form which may be cylindrical (column 4, lines 30-33) and there is no leakage (column 4, lines 45-46) despite the presence of a hole with an area in the recited range (in view of the diameter at column 4, line 34). In view of the measurement of fluorogenic groups as described by Schellenberger *et al.* at column 6, lines 57-60 it would have been obvious to one of ordinary skill in the art that any measurement method for analysis and measurement of a sample using the sample holder 12 occurred in an apparatus 10 of one of the recited types. Testing plate 12 is a sample holder. Although Schellenberger *et al.* proposes a variety of materials for the sample holder 12 (column 3, lines 38-41) and some of the materials may be fairly described as carbonaceous, a material of the recited group is known in the art of sample holders for a fluorescence measuring apparatus from Hunter (claim 11). See the apparatus (Fig. 7) and platen 10 with through holes 12 and fluorescence identified as an optical interrogation technique (column 6, lines 10-14). Since the art recognizes this material as equivalent to the materials proposed by Schellenberger *et al.* in view of the disclosure of Hunter at column 4, lines 51-54 no specific motivation is necessary to replace one material with another.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gratzl *et al.* (US006043878A).

With respect to independent claim 7, as best understood in the absence of clarity and the mixture of statutory categories of invention, Gratzl *et al.* discloses a sample holder **12** (Fig. **4**) which is a transparent surface (column 8, lines 21-22) in an apparatus for fluorescence or phosphorescence measurement (column 7, line 56). Only the sample **24** is placed in the path between source **70** and detector **72**.

Response to Submissions

17. The amendment filed August 16, 2001 has been entered.
18. This application has been published as US2002/0024018A1 on February 28, 2002.

Allowable Subject Matter

19. Allowable subject matter cannot be indicated for claims rejected under 35 U.S.C. 101.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishimura *et al.* (US005427959A) shows a sample holder having one or more of the recited shapes, but the measurements are made through the sides of the holder. Rothman *et al.* (US4837162A) shows a nylon substrate made to generate very little fluorescence.
21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (703) 308-4850. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Art Unit: 2878

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ch
May 21, 2003

Constantine
Constantine
Constantine Hannah
Primary Examiner